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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/430,289 10/29/99 D'ALESSIO

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EXAMINER

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IM52/0706

HON. S	
ART UNIT	PAPER NUMBER

1772
DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/430,289

Applicant(s)

D'ALESSIO ET AL.

Examiner

Sow-Fun Hon

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1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 21-44, 51-55, 57 and 58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 45-50, 56 and 59 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 7, 8.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-20, 45-50, 56, 59, drawn to an article, classified in class 428, subclass 35.7.
 - II. Claims 21-44, 51-55, 57-58, drawn to a method, classified in class 264, subclass 515.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the polymeric material on said internal surface of container can be halogenated before being coated onto the the container.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Joel Armstrong on May 16, 2001 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-20, 56, 59. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-44, 51-55, 57-58 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 10, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by the claim limitation "shelf-life". Does it mean that the combination of materials remain unchanged? If so, then it is also unclear whether the monomer composition and the interior container surface remain unchanged upon initial contact.

8. Claims 6, 7, 8, 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what the differences are between the polyethylenes.

9. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim limitation of "halogen concentration ..is greater than.." is not given any patentable weight unless defined by a finite value.

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-4, 9, 13-14, 16-17, 45-46 are rejected under 35 U.S.C. 103(b) as being unpatentable over Colvin (US Patent 3,523,628).

Colvin has a container for cyanoacrylate ester adhesives designed to minimize deterioration of contents and afford long shelf life stability, including a container body constructed of an air impermeable material, and a dispensing nozzle having at least the dispensing surfaces thereof formed of a thermoplastic resin having low surface free energy (abstract). The preferred thermoplastic resins are the halogenated hydrocarbon polymers, especially where the halogen is fluorine (column 4, lines 42-50). It would have been obvious to one of ordinary skill in the art to have used chlorine in place of fluorine since chlorine is a halogen, and chlorinated hydrocarbon polymers are less expensive. Colvin teaches that the synthetic resin employed as the container material or as a coating on the internal surfaces of the container is selected to satisfy the inertness with respect to the cyanoacrylate resin (monomer) (column 3, lines 39-50). It would have been obvious to one of ordinary skill in the art to have used the same resins for the container body as for the nozzle. Colvin teaches that the (alkyl) alpha-cyanoacrylate monomers have an alkyl chain length from 1-16 carbon atoms (column 5, lines 1-15).

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Applicant is reminded that even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). In the instant case, post-halogenated polymeric material is deemed the same as halogenated polymeric material.

Claims 5-6, 8, 10-12, 15, 18-20, 56, 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin as applied to claims 1-4, 9, 13-14, 16-17, 45-46 above, and further in view of McIntire et al. (US Patent 4,291,131) and Stehlik (US Patent 3,704,089).

Colvin has been discussed above. Colvin teaches that the preferred thermoplastic resins are the halogenated hydrocarbon polymers, especially where the halogen is fluorine, and that copolymers of ethylene with polymers of this type can also be used with excellent results (column 4, lines 42-50). Colvin fails to teach the specific claimed densities of polyethylene. In addition, Colvin teaches that the polymerization of cyanoacrylate resins must be free of basic substances to avoid initiation of polymerization of the resin within the container, but fails to teach the inclusion of a halogenated acid in the polymeric matrix.

McIntire et al. have a nozzle for use on containers for holding cyanoacrylate adhesives and comprised of moldable materials having an acid dispersed therein for inhibiting the polymerization of the adhesives within the nozzle (abstract), wherein the moldable materials are polyethylene with a density of about 0.90 to 0.98 and polypropylene (column 2, lines 55-68). It

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would have been mere routine optimization to select commercially available materials of the description above to make the container body, nozzle and cap.

Because McIntire et al. teach that inclusion of the acid dispersed in the moldable materials inhibits the polymerization of the cyanoacrylates, it would have been obvious to one of ordinary skill in the art to have used the materials of McIntire et al. in the invention of Colvin in order to obtain a molded dispensing container, nozzle and cap, containing cyanoacrylate with prolonged shelf life.

McIntire et al., however, fail to teach that the acid is halogenated.

Stehlik has a process for sterilizing (alkyl) alpha-cyanoacrylates with radiation, using hydrogen fluoride as the Lewis acid inhibitor (column 1, lines 15-50).

Because Stehlik teaches a process for sterilization of the cyanoacrylates using the specific claimed Lewis acid inhibitor, it would have been obvious to one of ordinary skill in the art to have used the specific claimed acid of Stehlik in place of the acid inhibitor of McIntire et al. in order to obtain a sterile cyanoacrylate dispensing container with good shelf life.

Therefore it would have been obvious to one of ordinary skill in the art to have combined the teachings of Stehlik and McIntire et al. in the invention of Colvin in order to obtain a sterile cyanoacrylate dispensing container with prolonged shelf life.

12. Claim 7, 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin as applied to claims 1-4, 9, 13-14, 16-17, 45-46 above, and further in view of Kvitrud et al. (US Patent 5,785,178).

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Colvin has been discussed above. Colvin teaches that the preferred thermoplastic resins are the halogenated hydrocarbon polymers, especially where the halogen is fluorine (column 4, lines 42-50) but fails to teach the specific claimed polyethylene terephthalate.

Kvidtrud et al. have a squeezable vial, which can be used for dispensing cyanoacrylates (column 1, lines 10-35), and teach that suitable polymeric materials for making the vial include blowmolded high density polyethylene (HDPE) and polyethylene terephthalate (PET) (column 3, lines 35-45).

Because Kvidtrud et al. merely demonstrate that HDPE and PET are well known in the art as suitable hydrocarbon polymers for making cyanoacrylate dispensers, it would have been obvious to one of ordinary skill in the art to have used the starting materials of Kvidtrud as the container body in the invention of Colvin in order to obtain a suitable dispenser for cyanoacrylates.

13. Claims 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin as applied to claims 1-4, 9, 13-14, 16-17, 45-46 above, and further in view of Larson et al. (US Patent 5,679,754).

Colvin has been discussed above. In addition, Colvin teaches that the materials should have low surface energy to reduce activation of the cyanoacrylates (column 3, lines 50-65), but fail to teach the other claimed types of functionalization of hydrocarbon polymers which would impart a low surface energy to the polymers.

Larson et al. have functionalized polymers with low surface energy which exhibit release characteristics toward adhesive materials (column 3, lines 30-32). The claimed functional groups are taught (column 25-65).

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Because Larson et al. teaches that the claimed functional groups impart low surface energy to polymers, it would have been obvious to one of ordinary skill in the art to have substituted the functional groups taught by Larson et al. for the halogen groups in the invention of Colvin in order to obtain alternate dispensing containers for cyanoacrylates with good shelf life.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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06/28/07


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

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